BEST AVAILABLE COPY

APPLICANT(S): SERIAL NO.:

GAZIT, Dan et al. 10/067,980

SEKIAI FILED: February 8, 2002

Page 4

P-4891-US1

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

- 1-22. Cancelled
- 23. (Currently Amended) A method of repairing or forming a cartilage in a subject in need-comprising the steps of:

obtaining a mesenchymal stem cell from [[of]] the subject;

transfecting said <u>mesenchymal stem</u> cell with a recombinant vector comprising a nucleic acid sequence encoding a factor of the T-box family Brachyury protein, so as to obtain an engineered cell which expresses a <u>Brachyury protein</u> factor of the T-box family; and

administering said engineered cell to the subject at a site of cartilage damage in the subject.

thereby repairing or forming cartilage in a subject.

- 24. (Currently Amended) The method of claim 23, wherein said mesenchymal stem cell is a mesenchymal stem cell, a progenitor cell, a cell that is capable [[to]] of differentiating [[e]] into a chondrocyte, a fibroblast or a synovial cell.
- 25. Cancelled.
- 26. (Currently Amended) The method of claim 23, wherein said cell further expresses a factor which upregulates [[the]] expression of the <u>Brachyury protein T-box</u> transcription factor.
- 27. (Currently Amended) The method of claim 26, wherein said factor which upregulates [[the]] expression of the <u>Brachyury protein factor of the T box-is FGF or BMP2</u>.
- 28. (Currently Amended) The method of claim 23, wherein said method further comprises administering a recombinant vector which comprises a nucleic acid encoding a factor

Confidential

BEST AVAILABLE COPY

APPLICANT(S): SERIAL NO.:

GAZIT, Dan et al. 10/067,980

FILED:

February 8, 2002

Page 5

P-4891-US1

which upregulates [[the]] expression of the <u>Brachyury protein T-box transcription</u> factor.

29. (Currently Amended) The method of claim 28, wherein said factor which upregulates the expression of the Brachyury protein factor of the T-box-is FGF or BMP2.

30-41. Cancelled.

- 42. (Currently Amended) A composition comprising an engineered <u>mesenchymal stem</u> cell which expresses a <u>Brachyury protein factor of the T-box family</u> and a pharmaceutically acceptable carrier.
- 43. (Currently Amended) The composition of claim 42, wherein said <u>mesenchymal stem</u> cell is a <u>mesenchymal stem cell, a progenitor cell or[[,]]</u> a cell <u>that</u> is capable [[to]] <u>of</u> differentiating[[e]] into a chondrocyte, a fibroblast or a synovial cell.
- 44. Cancelled.
- 45. (Currently Amended) The composition of claim 42, wherein said mesenchymal stem cell further expresses factor which upregulates [[the]] expression of the <u>Brachyury protein T-box transcription factor</u>.
- 46. (Currently Amended) The composition of claim 45, wherein said factor which upregulates [[the]] expression of the <u>Brachyury protein factor of the T box</u> is FGF or BMP2.
- 47. (Currently Amended) The composition of claim 45, wherein said composition is a pharmaceutical[[ly]] composition.

48-63. Cancelled.

Confidential